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ESTABLISHED 1879.

*The Oldest Eucalyptus Seed
Collector in Australia*

1940

*Descriptive Catalogue
of
Australian
Timber Tree Seeds*

COLLECTED AND SUPPLIED
BY

ANDREW MURPHY

"Grandview," WOY WOY,
N.S.W., AUSTRALIA.

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"GRANDVIEW,"

Woy Woy, N.S.W.,

1940.

To Patrons,—

I have much pleasure in submitting my Enlarged Descriptive Catalogue of Australian Timber Tree Seeds, mainly Eucalypts and Acacia.

The information given herein has been gained by practical experience as seed collectors.

All orders entrusted to me will receive my best attention, and will be despatched with the least possible delay.

All orders and correspondence must be written in English.

New customers are requested to give a reliable business reference or send **Cash with Order.**

It is as well to know that all our Australian timber trees are evergreen, such as Eucalyptus, Acacias, and Callitris.

Patrons may rely on being supplied with fresh seeds, as I collect from the new crops every year.

Hoping to obtain your patronage.

Yours faithfully,

ANDREW MURPHY.

The Mystery of the Blue Gum and Malaria.

During the later decades of the nineteenth century it was a common practice to plant Blue Gum or Eucalyptus trees in districts infected by malarial fever. It was held that the essential oil produced by the leaves combated the harmful vapours rising from the swamps, laden with the poison disease. The discovery that the malarial germ is introduced into the blood by a mosquito has settled once and for all the origin of the disease. Yet it is only within the last few months that a somewhat mysterious point has been fully settled. The theory that the Eucalyptus trees neutralized the poison vapours is nonsense, yet the fact remains that where Blue Gums were freely planted there was always a noted decline in the amount of malaria. For instance, in a certain district near Algiers the placing out of thousands of Eucalyptus trees completely transformed the conditions. Malarial fever of a peculiarly virulent type had formerly been a constant feature, but within twelve months of the planting of the Blue Gums the disease entirely disappeared and is now unknown.

What is the explanation of this circumstance? It has been demonstrated that of nearly all trees the Eucalyptus absorbs the greatest amount of water. Two seedlings, a Blue Gum and a Plum, were placed with their roots in water and the height of the water was carefully marked. The plants were kept in a warm atmosphere and examined at the end of 24 hours. The little Eucalyptus had disposed of four times the water that the Plum had been able to take up. Seeing that Blue Gums increase in height with great rapidity, often growing many inches a day in a

hot position, the amount of moisture taken up increases on a greatly progressive scale. And this is just what brings about the downfall of the malarial mosquito. To complete its life cycle it is necessary that this insect should pass its larval stage in pools of water. With the coming of the Eucalypti these pools, and indeed all marshy places, disappear; the breeding spots of the mosquitoes are gone, and in time the insects vanish altogether. The district is then free from malarial trouble simply because the carriers of the disease are not able to keep going. The suggestion carried in the foregoing paragraphs might well be used in districts infected with malarial mosquitoes, provided the climate is suited to the Blue Gums or Eucalyptus trees.

The mystery of the Blue Gum and Malaria Gum suitable for low-lying land for this purpose.

Euc. Baueriana.
„ bicostata.
„ botryoides.
„ camphora.
„ Kirtoniana.
„ longifolia.
„ Macarthuri.
„ microcorys.
„ microtheca.
„ numerosa.
„ ochrophloia.
„ ovata
„ radiata.
„ robusta.
„ rostrata.
„ saligna.
„ stellulata.
„ Stuartiana.
„ tereticornis.

Australian Timber Tree Seeds, Etc.

EUCALYPTUS.

E. affinis. Deane and Maiden.—Ironbark Box. A medium-sized tree, much after the habit of *E. albens*, but frequently greener in the foliage and much darker in the bark. It yields a pale, very hard, durable timber, suitable for all classes of rough work. It prefers a heavy loamy or sedimentary soil, and stands a fair amount of heat and cold. 25/- lb., 3/6 oz.

E. agglomerata.—Blue-leaved stringybark; a bit like *E. Capitellata*, but a larger tree; fairly quick grower, and generally reaches a height of about 80 to 100 feet high, and timber one of the best; used for all kinds of work, such as bridges, housework, sleepers; anywhere where durability is required. Generally grows at an elevation of one to three thousand feet above sea level. Grows in almost any kind of soil. 25/- lb., 3/6 oz.

E. aggregata.—Black Gum. Usually a small tree, about 3 feet in diameter and about 70 feet high, with very large spreading head. A splendid shade tree for stock. It grows in swampy, low-lying flats and along sides of water-courses. Timber sometimes used for fence posts and fuel. 25/- lb., 3/6 oz.

E. albens. Miq.—White Box. The leaves of this variety are mealy white, giving the tree an ornamental appearance; about 90 feet high, and diameter 3 feet, having a good straight stem. Suitable for cool climates; will stand sleet and light snow storms. The foliage of this tree is used largely for feeding cattle and sheep in droughts. They eat it freely after it has been felled a couple of days, as it seems to get sweeter. The timber is hard, close-grained and very durable. Used similar to *E. hemiphloia*. Grows in dry parts, on slopes and gravelly ridges, sometimes extending to flat country. 25/- lb., 3/6 oz.

E. Andrewsii. Maiden.—New England Blackbutt. A large umbrageous tree of the Northern Tablelands, occurring mainly on arid granite soils at an elevation of 2000 to 4000 feet, and is hardy and more frost-resistant than most species. The timber is pale, rather soft, and is regarded as a second-grade timber for building purposes. It stands close cutting, and in suitable localities it makes a good tree for streets and parks. 25/- lb., 3/6 oz.

E. angophoroides.—Apple Tree Gum. A large tree of rapid growth. Timber good; used for house-building, fencing, bridge-building, etc. Grows at an elevation of 1000 feet above sea level. 25/- lb., 3/6 oz.

E. Baileyana. F.v.M.—Stringybark. A tree attaining a height of 150 feet, diameter 4 feet, a straight stem with large spreading head and dense foliage; makes good shade tree. Timber tough, durable and fissile; used for fence posts, rails, palings, tool handles and various other purposes. Grows on poor, sandy land and stony ridges in Queensland in warm regions. 25/- lb., 3/6 oz.

E. Bancroftii. Maiden.—Bancroft's Gum, or Orange Gum. A small to large tree, with a smooth yellowish bark, which turns ashy blue with age. It is a sub-alpine species, and does best in light loamy or deep alluvial soils. The timber is red, and is useful for posts, rails, sleepers and fuel. 25/- lb., 3/6 oz.

E. Baueriana.—Blue Box. A medium-sized tree, 3 to 4 feet diameter. A very useful timber for house-building, bridges and anything where great strength is required. Grows in cool climate at an elevation of 2000 to 3000 feet. A splendid firewood, like all other box trees. Price 25/- lb., 3/6 oz.

E. Beyer-Baker.—A tree similar to *E. crebra*, only timber lighter in colour similar to *E. paniculata*. A tree 3 to 4 feet diameter and about 100 feet high; suitable for a medium climate and timber very useful for sleepers and all kinds of general work. Price 25/- lb., 3/6 oz.

E. bicostata. Maid. Blk. and Simmd. Eurabbie. A tree of rapid growth, attaining over 150 feet in height, with long, straight stems. The timber is used extensively for shipbuilding, house carpentry, bridgemaking, fence rails, telegraph poles, railway sleepers, shafts and spokes of drays, and for any purpose where strength and durability are required. The leaves yield a large percentage of valuable oil. 25/- lb., 3/6 oz.

E. Blaxlandi.—Stringybark. A tree attaining a height of 150 feet, diameter about 4 feet. Timber similar to *E. Muelleriana*, and for same purposes. Found growing at an elevation of between 2000 and 3000 feet above sea level. 25/- lb., 3/6 oz.

E. Bosistoana. F.v.M.—One of the best timbers I know of. Timber quite equal to *E. Maideni*, and of rapid growth. We often come across trees 12 feet through, and occasionally one 14ft., and a good bit over 200 feet high. Timber very hard and durable. Used for fencing, telegraph poles, girders, railway sleepers, house building and wheelwright's work. Does well on gravelly and stony ridges, in moderately cool district about 1000 to 3000 feet above sea level. Used for all purposes where great strength is required. 25/- lb., 3/6 oz.

E. botryoides. Sm.—Bangalay. A stately tree; stems attain 70 to 80 feet without a branch, and a diameter of 6 feet. Timber adapted for waterworks, keels, planking and ribs of vessels and fencing. Posts from aged trees known to last over 25 years. Grows near the coast and on river banks in sandy land and medium climate. £1 lb., 3/- oz.

E. Caley. Maiden.—Caley's Iron-bark. A small more or less silver-leaved species, usually found on the New England Tableland at an elevation of 2000 to 3000 feet. It is small and ornamental, and is useful for street

planting. It prefers deep loamy and rich granite soils. The timber is durable in and out of the ground, and is specially useful for heavy work. 25/- lb., 3/6 oz.

E. calophylla.—Red Gum Tree of South-West Australia. A tree of rapid growth, attaining a height of 150 feet, diameter 10 feet. Timber tough; much used for naves, spokes, harrows, ploughs, shafts, handles and various building purposes. Thrives in tropical and warm climates in fairly good soil. Price 25/- lb., 3/6 oz.

Eucalyptus Camfieldi, Maiden, Heart-leaved Stringybark.—This species varies from a densely branched shrub or small Mallee with many slender stems, to a round-headed tree 20 feet high. The young leaves are heart-shaped and persist for a long period; the mature or adult leaves are oblong to lance-shaped, thick, dark-green and shining. The buds are roundish and set close together, and the flowers are white with a strong honey-like aroma. It prefers sandstone hills, moist sandy slopes, or deep alluvial soil, and is one of the most attractive of the Mallee stringybarks for horticultural purposes. 25/- lb., 3/6 oz.

E. camphora.—A tree about 80 feet high and 3 feet diameter. Timber tough; useful for various purposes; leaves yield a rich, valuable oil. This tree thrives in swampy watercourses where other Eucalypts would perish. Price 25/- lb., 3/6 oz.

E. capitellata. Sm.—White stringybark. A large tree; often attaining a height of 200 feet and diameter 5 to 6 feet. Grows well in low, flat country, also on barren ridges and mountain spurs. Timber excellent for house carpentry; largely used for flooring boards, battens, joists, rafters, fencing material and railway sleepers. The bark is used for thatching. £1 lb., 3/- oz.

E. cinerea. F.v.M.—Argyle Apple. A tree of about 50 feet in height. This tree is very similar in appearance to *E. pulverulenta*, only taller and straighter and the leaves longer. This species is only grown for its valuable oil and ornamental purposes. Grows in rocky and stony land and cool climates. 25/- lb., 3/6 oz.

E. citriodora. Hook.—Lemon-scented Gum, of Queensland. A handsome, slender tree. Timber very useful; the leaves yield a very large supply of volatile oil of lemon-like fragrance. Grows in low, flat country and extends to stony ridges. 25/- lb., 3/6 oz.

E. conica. Deane and Maiden.—Fuzzy Box. A medium-sized tree, with pendulous branches, somewhat similar to *E. melliodora*. It is very hardy, and will stand a fair amount of heat and cold. It occurs a few hundred feet above sea level, and ascends to about 3000 feet elevation. It is found on alluvial soils, sandy loam and granite outcrops. The timber is very tough, hard, durable in the ground, and is extensively used for posts. It makes an ideal shade and shelter tree. 25/- lb., 3/6 oz.

E. Consideniana. Maiden.—A tree about 3 feet in diameter and about 60 to 70 feet high. This tree is very similar to *E. piperita* in appearance and also timber. I have seen it used for rails and palings, and it may be used for a variety of other things above the ground. Makes a fair fuel. The advantage of this timber is that it grows in the poorest soil, on mountain tops and the sides thereof. I have found it growing near the coast about 400 feet above sea level; also inland at an elevation of 3000 feet in the snow board, so it is not one that is particular to climate. Where I found it growing 3000 feet above sea level in the cold country was a far superior timber; was close-grained and less rings. 25/- lb., 3/6 oz.

Eucalyptus Cordieri, Trabut. Mealy Bundy.—A medium-sized to tall tree with a brown persistent bark on trunk and main branches, the branchlets and young leaves frosted or silvery, as are also the buds and fruits. The timber is pale-coloured, soft, easily worked, not very durable in the ground, and is suited for indoor work, 3-ply, paper pulp, and fibre boards. It favours sedimentary soils at high elevations and rarely descends below 2000 feet. It is of good form with spreading branches and silvery branchlets which are a striking feature of the landscape in its native habitat, and is recommended for shade, shelter and ornament in temperate and fairly cold regions. 25/- lb., 3/6 oz.

E. crebra. F.v.M. — Ironbark. A moderate-sized tree. Timber red, very valuable, hard, tough, inlocked and strong; much esteemed by coachbuilders and wheelwrights for poles and shafts of carriages and spokes and naves of wheels; also for piles and railway sleepers and in the construction of bridges. Thrives well inland in hot climates, in open forests and on gravelly, rocky ridges. 25/- lb., 3/6 oz.

E. Dalrympleana.—A tree very similar in appearance to *E. viminalis*; used for all kinds of building material. A very large and straight tree; grows in very cold country; stands snow and sleet well; elevation about 3000 to 4000 feet. 25/- lb., 3/6 oz.

E. dealbata. A. Cunn.—A medium tree, attaining a height of about 100 feet. Tree very similar to *E. tereticornis* in appearance and quality of timber, and used for same purposes. Diameter 3 to 4 feet. Prefers cool, medium climate; not particular to soil. 25/- lb., 3/6 oz.

E. Deanei.—A tree of 150 feet high and 6 feet in diameter. Timber red, heavy, and easily wrought; used for house-building, fencing and railway sleepers. Grows in open forests in flat country with fair soil. 25/- lb., 3/6 oz.

E. dives. Schau.—Peppermint. A tree of 80 to 90 feet high and 3 to 4 feet diameter. Grows in poor soil in mountain regions; timber affords fair fuel; foliage yields large quantities of oil suitable for flotation purposes. £1 lb., 3/- oz.

E. elaeophora. F.v.M.—A tree about 80 to 100 feet high and 3 to 4 feet diameter. Grows well in hilly or mountainous country; cool climate. Timber hard and close-grained; used for fencing material, building purposes, and makes fair fuel. 25/- lb., 3/6 oz.

E. eugenioides. Sieb.—A tree about 4 feet in diameter; stem very tall and straight. Timber of a pale red colour, fissile; used for flooring boards, rafters, studding, joists and fencing. The bark is very useful for rough roofing. It grows generally on poor, hilly ground and sometimes on sandy lowlands. £1 lb., 3/- oz.

E. exserta. Queensland variety.—A tree of medium size. General useful timber wood; hard and tough. Grows along river banks and hillsides in fairly hot climates. 25/- lb., 3/6 oz.

E. eximia. Schau.—Yellow Bloodwood. A tree of moderate size. Timber used for fencing and knees and ribs of vessels. It generally grows on hard, rocky ground, in elevated situations, extending to flat country. £1 lb., 3/- oz.

E. fastigata. Deane and Maiden.—Victorian and New South Wales Mountain Ash. A tree of about 150 feet high and 5 feet diameter. Timber fissile; used for staves, palings, laths and general building purposes. Its general habitat is cool country, such as heavy frosts and snow occasionally. Generally grows in high situations on mountain spurs and tablelands. 25/- lb., 3/6 oz.

E. fraxinoides.—This is one of our best timber trees; is good for all kinds of building purposes; grows in middling cold country, with elevation about 3000 feet. 25/- lb., 3/6 oz.

E. gigantea. Hook. Syn. **E. delegatensis.** R. T. Baker.—Silver-topped Mountain Ash. A very straight tree, about 200 feet high, diameter 6 feet. Timber fissile; much used for coach-building, house building, rails, palings, etc. Grows on some of the highest snow mountains. 25/- lb., 3/6 oz.

E. goniocalyx. F.v.M.—New South Wales Blue Gum. A tree attaining a height of over 200 feet and diameter 6 feet. Timber very valuable; extensively used for building purposes, scantlings, battens, flooring boards, posts and rails, ships' planks, naves and felloes of wheels. Leaves yield valuable oil. Grown in mountainous country and on tablelands. 25/- lb., 3/6 oz.

E. grandis. Hill Maiden.—Flooded Gum. A tall shaft-like tree 60 to 150 feet high, with a smooth whitish or silvery grey bark, and red durable timber, and is cut as a general hardwood. It prefers deep loamy, well-watered and well-drained soil, and a warm sheltered position. It occurs on the coast range of New South Wales and Southern Queensland. 25/- lb., 3/6 oz.

E. gummifera Hosch.—Bloodwood. A medium-sized tree of quick growth, straight stem. Timber used for posts, rails and piles; lasts well underground; makes good fuel (*E. corymbosa*. Sm). 25/- lb., 3/6 oz.

E. haemastoma. Sm.—White Gum. A fair-sized tree; attains a height of 40 feet. Timber used for fencing and fuel. This species thrives well on poor, sandy land, particularly in elevated situations. £1 lb., 3/- oz.

E. hemiphloia. F.v.M.—Grey or White Box. A tree of 150 feet in height. Timber of first-class quality; hard, tough, and durable; used for railway sleepers, telegraph poles, shafts, spokes, mauls, plough beams, scantlings and battens. This variety is suitable for cool climate, as light snows and sleet, as well as tropical. It is an excellent fuel, generating a large amount of heat. 25/- lb., 3/6 oz.

E. Kirtoniana. F.v.M.—A small to medium-sized tree, dark green foliage; makes a good shade tree and of good appearance. Thrives well on swampy land. 25/- lb., 3/6 oz.

E. laevopinea.—Silver-topped Stringybark. A moderate-sized tree and straight stems; very similar to *E. macrorrhyncha* in appearance. This timber is very suitable for fencing, as the posts stand a long time in the ground. It is very close-grained and good for general heavy building purposes. It is used for wood blocks and railway sleepers. Grows in good soil on flats and ridgy country. 25/- lb., 3/6 oz.

E. longifolia. Link et Otto.—Woollybutt. A large tree, sometimes attaining a height of 200 feet and diameter of 8 feet. Timber strong and durable; employed for wheelwright's work, railway sleepers, fencing and many other purposes; good domestic fuel. The leaves yield a valuable volatile oil. Cool climate. 25/- lb., 3/6 oz.

E. Macarthuri. Deane and Maiden.—Swamp or River Woollybutt. A fair-sized tree. Timber used for fence rails and building purposes, and supplies a good fuel. Leaves yield a valuable oil. Generally grows on lowlands near the banks of fresh water rivers and creeks. Cool climate. 25/- lb., 3/6 oz.

E. macrorrhyncha. F.v.M. — Red Stringybark. A lofty tree; attains a height of over 100 feet. The wood is durable and easily split into fence rails and palings, and is useful for all purposes where rough split timber is required above ground and for sawn timber for house-building. The bark is extensively used for thatching sheds, huts, etc.; the wood makes fair fuel and charcoal for blacksmiths. Grows in ridgy country and round the base of mountain spurs, preferring a good soil. Medium climate. £1 lb., 3/- oz.

E. maculata. Hook.—Spotted Gum. A handsome tree; stem straight up to 90 or 100 feet without branching; diameter 6 feet. Timber used for shipbuilding, upper parts of bridges, railway sleepers, house-building, wheelwright's and cooper's work. Generally grows on the slopes and tops of stony ridges and also in low flats. 25/- lb., 3/6 oz.

E. maculosa. R. T. Baker.—A tree over 100 feet high and about 6 feet diameter. This is the large mountain variety of *E. Gunii*, and usually grows straight. A good, useful timber; used for all kinds of rough work. I have even seen these trees doing well in poor soil on mountain tablelands. Prefers cool climate. 25/- lb., 3/6 oz.

E. Maidenii. F.v.M.—Similar to *globulus*. A tall, straight tree; generally grows to a height of 150 to 180 feet. Strong and durable; timber used for wheelwright's work, railway sleepers, house-building, rough fencing, etc. Grows in rocky or loamy soil at an elevation of 3000 to 5000 feet. Stands cold even better than *E. globulus*. 25/- lb., 3/6 oz.

E. melanophloia. F.v.M. — Silver-leaved Ironbark. A medium-sized to large tree, useful for shade, shelter and ornament. It yields strong and durable fencing posts, and rough constructional timber. It withstands heat and drought, and does well on clay soils. 25/- lb., 3/6 oz.

E. melliodora. A. Cunn.—Yellow Box. A fair-sized tree; timber hard, tough and durable; used for shipbuilding, house carpentry, wheelwright's work, fencing, railway sleepers and the young trees for telegraph poles; the wood

makes excellent fuel; grows chiefly on ridges but often descending into valleys; will grow in poor soil. Cool climate preferred. 25/- lb., 3/6 oz.

E. micrantha. D.C.—Similar to *E. haemastoma*, though the stem attains a greater height, sometimes exceeding 100 feet. The timber is used for fencing, sleepers and fuel. The foliage is narrow, and the trees often take on a Willow-like appearance. £1 lb., 3/- oz.

E. microcarpa. Maiden.—A similar tree to *E. hemiphloia*, but taller and longer in the stem. Timber used for girders, for bridges and bridge plank-ing, and any purpose where strength is required, house-building, etc. Grows in hot localities; also cool places. 25/- lb., 3/6 oz.

E. microcorys. F.v.M.—Tallowwood. A tall tree; attains a great size; barrel up to 100 feet in length and 7 feet in diameter; timber hard and durable; lasts underground; used for railway sleepers, wheelwright's work, knees and breasthooks in shipbuilding, flooring boards and house carpentry, and is not a favourite of white ants. Grows in fairly good soil near coast in medium climate. 25/- lb., 3/6 oz.

E. Muelleriana. F.v.M.—Stringybark. A large tree of rapid growth; attaining a height of 200 feet and diameter of 8 feet; timber excellent for house carpentry, shipbuilding, railway sleepers, fencing, palings, etc. Grows in valleys and slopes of ridges. Suitable in cool or warm climates. 25/- lb., 3/6 oz.

E. Murphyi.—The Black Box. A tree about 3 to 4 feet diameter and 80 to 100 feet high; suitable for growing in medium climate; a very useful timber for fencing, as it stands long in the ground, or for any rough building purposes, such as battens and palings, etc., and a splendid firewood. Grows on low, flat country and mountains. 25/- lb., 3/6 oz.

Eucalyptus niphophila, Maiden and Blakely, "Snow Gum."—This species is confined to the Australian Alps at altitudes ranging from 5200 to 6500 feet, and marks the limit of tree life on Mt. Kosciusko, the highest mountain in Australia. The winters are severe, snow often lying on the ground for

several months; the rainfall is not less than 60 inches per annum. The trees seldom exceed 40 feet and often are only 3 feet; where there is shelter they form short boles and rounded crowns of green shining leaves and silvery branchlets, buds and fruits. Owing to the short summer, the buds mature quickly, and sometimes the fruits ripen the same year. It is the most frost resistant species on the mainland and should be useful for ornament and shelter in cold regions. 25/- lb., 3/6 oz.

E. nitens.—A tall, straight tree about 10 feet in diameter; tree very solid, and yields a tremendous amount of very valuable milling timber; also used for sleepers, girders, etc. Suitable for cold climate. Found growing with *E. gonio-calyx* and *E. Maideni*. 25/- lb., 3/6 oz.

E. nova-anglica. Deane and Maiden. —New England Peppermint. A large rusticated tree, with a rough bark and silvery foliage. It is suitable for shade, shelter and ornament. It prefers granite and basaltic soils at high elevations, and is suitable as a nurse for the better class of timber. The timber is of poor quality, and is only used for rough local work. 25/- lb., 3/6 oz.

E. numerosa. Maiden.—River White Gum. A useful tree; usually grows on the banks of rivers and on the edges of swampy land; of rapid growth; strong and elastic timber when young. £1 lb., 3/- oz.

E. obliqua. L'Her.—A tree of rapid growth, attaining a height of about 300 feet; straight stem; diameter often 10 feet; timber very fissile; used extensively for sawn hardwood for general building purposes, fence rails, palings and shingles; the bark is used for rough roofing and also in the manufacture of paper. Suitable for cool or medium climate. 25/- lb., 3/6 oz.

E. obtusiflora. DC.—Port Jackson Mallee. A small ornamental shrub or small tree, useful for gardens or shrubberies. It flowers freely when only 4 to 6 feet high, and is a very useful bee plant. It stands both heat and cold. £1 lb., 3/- oz.

Eucalyptus obtusiflora, D.C., var. **dendromorpha**, Blakely, "Sandstone Ash."—A tall Mallee or a small tree of 20-40 feet, with a little rough bark on

trunk and smooth, white branches, found chiefly on the cold side of moist sandstone ridges and depressions. The leaves are alternate, lance-shaped or slightly curved, light to dark green, thick and shining, 2-6 inches long, and $\frac{1}{2}$ to 1 inch broad. The flowers are fairly large and white, and the fruits are oval to urn-shaped. It is fairly frost-resistant and should be useful for small timber, fuel, shade, ornament and shelter in moderately cold districts. 25/- lb., 3/6 oz.

E. oreades. R. T. Baker (*E. altior*: Maiden).—Blue Ash. One of the most important trees for mountain forestry. Its strong clean stems commonly attain 60 to 80 feet to the first branch. It often grows in the most exposed situations at an elevation of 2000 to 3500 feet above sea level, and withstands both frost and snow. It does not break freely after cutting. The timber is white, very fissile, light and strong, and valuable for light constructional and carriage work. It is one of the most remarkable trees on the Blue Mountains, and the admiration of thousands of visitors from abroad. 25/- lb., 3/6 oz.

E. ovata. Labill.—White Gum. A tree from 3 to 4 feet diameter, fairly straight; generally used for fencing, palings, or any rough work; fair fuel; grows generally in low lands, particularly swampy, at an elevation from 2000 to 4000 feet. Suitable for cold country. 25/- lb., 3/6 oz.

E. paniculata. Sm.—White or Grey Ironbark. A fair-sized tree; timber very valuable; hard, tough, inlocked and strong; highly esteemed by coach-builders and wheelwrights for poles, shafts, spokes and naves of wheels; also for piles, railway sleepers, beams, girders and telegraph poles; makes good fuel. Grows generally in sandstone country on the tops and sides of stony ridges and in valleys near the coast. Medium climate. 25/ lb., 3/6 oz.

E. pauciflora Sieb. (*E. coriacea*. A Cunn.). White Gum. A tree of 80 to 100 feet in height and 4 feet diameter, of handsome appearance, with drooping branches. The foliage is eaten by cattle and sheep in dry seasons. It is a very hardy eucalypt, and grows well

in swampy lowlands and thrives in cold climates, and is not affected by snow. Timber used for building and fencing purposes. The flowers of this variety are so massive it is splendid for bees. £1 lb., 3/- oz.

Eucalyptus pauciflora, Sieb. var. **nana**, Blakely.—A slender Mallee forming dense thickets over large areas; stems 3-12 feet high and $\frac{1}{2}$ to 3 inches in diameter, the whole mass usually heavily laden with flowers and fruits. It prefers a rather poor, moist sandy soil overlying pipeclay at 3000 to 3600 feet. It is of good form with reddish branchlets, narrow oblong to lance-shaped, very glossy, rather thick leaves, snow-white flowers, and small shining fruits much smaller than those of the species. It is singularly attractive when in full bloom, the red twigs and snowy flowers make a pleasing contrast. It is frost-resistant and valuable for alpine or subalpine culture. 25/- lb., 3/6 oz.

E. pellita. F.v.M.—A mountain variety of red Mahogany. A tree attaining a height of 100 feet, 6 feet in diameter, timber of reddish colour, and used for fencing, beams, sleepers and bridge work. Grows on mountain spurs and tablelands in poor soil. 25/- lb., 3/6 oz.

E. Pilligaensis. Maiden.—Narrow-leaved Box. A fair-sized tree, with a clean straight stem and rather large canopy of narrow dark green leaves. It usually occurs on red sandy loam or shallow soils on clay subsoils, and will stand a fair amount of heat and droughty conditions. The timber is strong and heavy, durable as fence posts and sleepers. 25/- lb., 3/6 oz.

E. pilularis. Sm.—Blackbutt. A tree attaining occasionally a height of 300 feet and diameter 15 feet; a great timber-yielding tree of rapid growth; timber fissile; excellent for general purposes; used largely for house purposes, laths, telegraph poles, railway sleepers, fence posts and rails. Grown in rich soil, extending to mountain slopes. Medium climate. £1 lb., 3/- oz.

E. piperita. Sm.—Peppermint. A tree attaining a height of 150 feet and in diameter 4 feet. The wood is fissile

and used for general building purposes. £1 lb., 3/- oz.

E. Planchoniana. F.v.M.—Bastard Tallow Wood. A moderately large umbrageous tree, usually confined to poor sandy soils over clay, and in areas with a 35 to 60 inch rainfall. The timber is hard, heavy and durable, and somewhat resembles Tallow Wood and Mountain Ash. It is used for bridge work and sleepers. The flowers are large and white, while the fruits are ornamental. 25/- lb., 3/6 oz.

E. polyanthemos. Schau.—Red Box. A moderate-sized tree of about 130 feet in height and diameter 4 feet; timber red, close-grained, hard and very tough; in great demand for cogs, naves, felloes, props for mines and railway sleepers; most excellent fuel; thrives in temperate and very cold climates on dry ridges and hilly country. 25/- lb., 3/6 oz.

E. populifolia. Hook.—Poplar Box. A moderate-sized tree; grows in rich soil in hot localities; a good drought-resisting timber; wood of brownish colour; very hard and durable; used for fence posts, rails and house-building; makes an excellent fuel; handsome appearance owing to its shiny green leaves. 25/- lb., 3/6 oz.

E. propinqua. Deane and Maiden.—A Grey Gum similar to *E. punctata*. Timber very hard, close-grained and durable; used for railway sleepers, fencing, bridge-building and a variety of purposes. 25/- lb., 3/6 oz.

Eucalyptus pulverulenta, Sims, "Silver-leaved Mountain Gum." A very ornamental glaucous shrub or small tree of 10-30 feet, usually found on silurian slate and mica schist formations. The young and mature leaves are opposite, roundish, heart-shaped to oval, stem-clasping and usually very silvery. The young tips in the spring are pink, tinted with silver, and are very beautiful. The buds are moderately large and the flowers are white and fragrant. It withstands fairly low and high temperatures and will grow wherever *E. cinerea* (another silvery-leaved species) succeeds. 25/- lb., 3/6 oz.

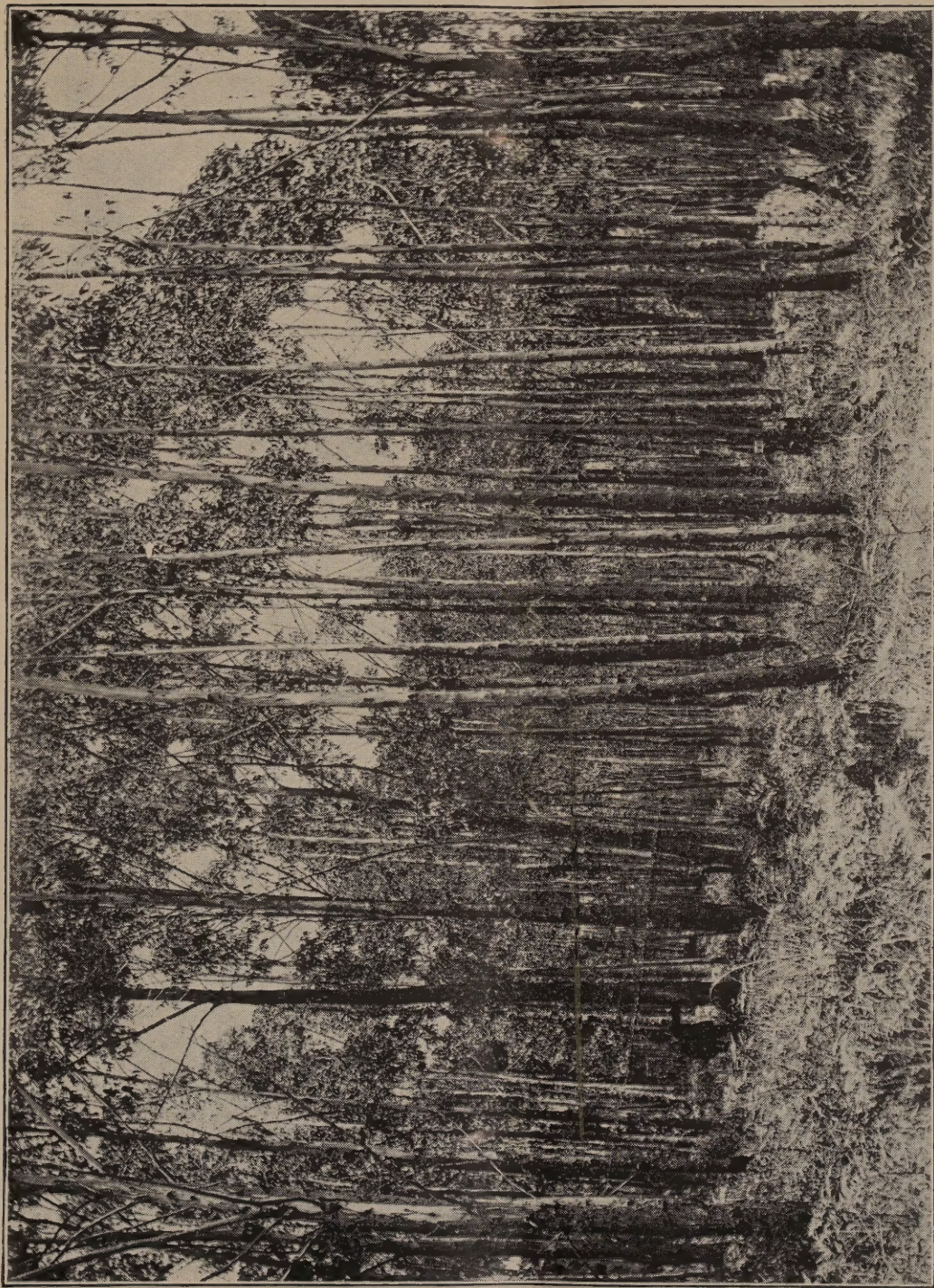
E. punctata. DC.—Grey Gum. A tree of quick growth; height over 100



E. Deanei growing in its natural state along the side of the ranges near Moonee Creek, west of Somersby Waterfalls, near foot of Penang Range.



Showing *E. maculata* (smooth bark) and *E. paniculata*, growing in their natural forest near Woy Woy, New South Wales. This is to show customers that none of our Eucalypts need any cultivation.



Natural regeneration of *E. pilularis*, showing a young forest, about ten years old, from seed growing naturally on the side of a hard gravel ridge; no cultivation. Many of these trees are fit for telegraph poles, etc. This photo was taken near Gosford Racecourse.



E. saligna growing in the wild forest; no cultivation. This photo was taken six miles west of Gosford, on the Penang Range, near Somersby Waterfalls.

feet, diameter 4 feet; timber is tough, extremely durable, hard, close-grained, difficult to split; used for fence posts, railway sleepers, wheelwright's work, rough building purposes and ship-building; is durable underground and makes superior fuel. Grows in dry and rocky places; medium climate. £1 lb., 3/- oz.

E. quadrangulata.—A Box Tree. No occasion to say the value of this tree for timber purposes, as the timber-getters have it nearly all cut out; used for all kinds of work. Grows in very rough rocky country on sides of mountains at an elevation of 1000 to 3000 feet above sea level. 25/- lb., 3/6 oz.

E. radiata Sieb.—White Peppermint. A moderate to very large-sized tree. Timber useful for house carpentry, shipbuilding, rails and palings; particularly suitable for flotation purposes. The leaves yield the greatest percentage of oil of any Eucalypt. £1 lb., 3/- oz.

E. resinifera. Sm.—Forest or Red Mahogany. A tall tree, over 100 feet high and 6 feet in diameter; timber of reddish colour, very strong and durable; used extensively for fencing, beams, rafters, rough carpentry, bridges, etc.; not a favourite with the white ant. Well suited to tropical climates; also grows well in cool districts near the coast. £1 lb., 3/- oz.

E. Robertsoni.—A very useful tree for house-building. Fence posts of this tree have been taken out of the ground after 30 years. Used extensively for railway sleepers and telegraph posts and pick handles, etc., and sometimes for furniture, as it takes a good polish. Grows in cold country, such as 3000 to 4000 feet above sea level; reaches a height of over 100 feet and 4 to 6 feet diameter; makes a fair firewood. This is a fast-growing species. It is very similar in appearance to *E. radiata*. 25/- lb., 3/6 oz.

E. robusta. Sm.—Swamp Mahogany. A tree of over 100 feet high and 5 feet diameter; timber strong and durable; used largely for joists, fence posts, wheelwright's work, shipbuilding and implements. Thrives best in low swamp ground. £1 lb., 3/- oz.

E. rostrata. Schlech.—River Red Gum. A tree 100 feet or more in height and 10 feet in diameter; a sound tree, yielding a great bulk of timber. It is highly prized for its durability, lasting for many years in fresh or salt water and underground. It is extensively used for railway sleepers, telegraph poles, fence posts and rails, piles, bridge-making, wheelwright's work and ship-building. Grows nearly throughout Australia in moist alluvial valleys and along fresh water river banks. Leaves yield a valuable volatile oil. 25/- lb., 3/6 oz.

E. rubida. Deane and Maiden.—White Gum. A tree attaining a height of over 100 feet and 4 feet diameter; timber fairly hard; used for railway sleepers, fencing, palings and rough building purposes; cool climate; makes good fuel. Grows in low, flat country. £1 lb., 3/- oz.

E. Rudderi. Maiden.—Rudder's Box. A moderately tall straight tree, with a rough fibrous bark, and red very durable timber, somewhat similar to that of *E. crebra*, with which it is often confused. It prefers a rich heavy loam or deep well-drained soil, but does moderately well on heavy, well-drained clay soils. It likes heat and sheltered positions, and will not stand severe cold. 25/- lb., 3/6 oz.

E. saligna. Sm.—Blue Gum Tree. A tall, straight-stemmed species of rapid growth, attaining a great height and diameter of 7 feet; timber of excellent quality and of a cedar colour; largely used for shipbuilding, bridgework, house-building, railway sleepers, felloes and telegraph poles. This is one of our best timbers. It grows in rich soil in low, flat country. Medium climate. £1 lb., 3/- oz.

E. Seeana. Maiden.—Narrow-leaved Cabbage Gum. A medium-sized tree, with a smooth mottled bark and red timber. It is suitable for parks and pleasure grounds, and does best on moist, well-drained stony soils. The timber is mainly used for posts and fuel, and is sometimes cut into palings and weatherboards. 25/- lb., 3/6 oz.

E. siderophloia. Benth.—The broad-leaved Red Ironbark. A tree of 150 feet in height and 5 to 6 feet in diameter;

timber of highest reputation for strength and durability, and is very hard; it is much used for large beams, railway sleepers, wheelwright's work and all purposes where great strength is required. It grows in rich soil or on rocky ridges or in dry, gravelly country. 25/- lb., 3/6 oz.

E. sideroxylon. A. Cunn.—Ironbark Tree. It attains a height of 120 feet and a diameter of 5 feet; timber of great strength, hardness and durability; it is extensively used by ship-builders and waggon-builders, for railway sleepers, underground mining work, handles of various implements; the bark is very rich in Kino-tannin. Mostly grows on rough, stony ridges and mountains in hard, dry situations; also thrives in most tropical climates; also cool climates; stands snow and sleet. 25/- lb., 3/6 oz.

E. Sieberiana. F.v.M.—Mountain Ash. A lofty tree often over 150 feet in height and diameter 5 feet or more; timber of superior quality, hard, tough, light and elastic; makes good fence rails, palings, railway sleepers and house-building material; a good fuel. Grows on mountain tops and sides of stony ridges, and sometimes extending to the low, flat country. Cool climate; stands snow and sleet and heavy frosts. £1 lb., 3/- oz.

E. Smithii. R. T. Baker.—Known as Gully Ash or White Top. A tree of about 150 feet in height and 5 feet diameter; very straight stems; timber used largely for house-building, fence rails and palings; leaves very rich in oil; much sought by distillers. Grows in rocky valleys in elevated situations about 1000 to 3000 feet. Cool climate. 25/- lb., 3/6 oz.

E. squamosa. Deane and Maiden.—Ironwood. A moderate-sized tree about 3 feet in diameter and about 70 feet high; this is generally found growing on mountain tablelands and on mountain sides, in the poorest of soil; timber of a very dark reddish colour; very hard, close-grained and durable; used for fencing, etc., and also makes good fuel. 25/- lb., 3/6 oz.

E. stellulata. Sieb.—Lead or Slaty Gum. A small-sized tree attaining a height of 50 feet and often over 1 foot

in diameter; timber affords a good fuel; thrives in cold mountain regions and elevated valleys; leaves yield a fair amount of oil. 25/- lb., 3/6 oz.

Eucalyptus stricta, Sieb., "Blue Mountain Mallee."—A Mallee with numerous slender, whip-stick-like stems, 3-6 feet high when growing on the mountain tops, or a tall Mallee or small tree up to 40 feet high in the rich soils of the gullies. It is strictly a sandstone species and invariably is found in the most exposed places on the Blue Mountains at 1500-3500 feet. It is of graceful habit with narrow, light green, shining leaves, snow-white flowers and dainty urn-shaped fruits. It is one of the hardiest of our mountain species and, apart from its neat appearance, is exceedingly useful for preventing mountain-top erosion, while its slender stems can be used for many purposes. 25/- lb., 3/6 oz.

E. Stuartiana. F.v.M.—A middle-sized tree of rapid growth, attaining a height of 90 feet and diameter of 3 or 4 feet, with large, spreading head and thick foliage; a good shade tree; timber hard and durable; used for fencing and for furniture, as it takes polish well; also sawn up for building purposes, and affords excellent fuel. Grows in sandy and low tracts of country and sometimes on low ridges. £1 lb., 3/- oz.

E. subviridis. Maiden and Blakely.—A tree about 70 feet high and 2 feet in diameter; makes a splendid shade tree when kept cut back. 25/- lb., 3/6 oz.

E. terminalis. F.v.M.—Long-fruited Bloodwood. This timber is principally used for posts and rails. It stands a great length of time in the ground; similar to *E. corymbosa*. Suitable for growing in hot climates, and a good shade tree owing to its thick foliage. Price, 25/- lb., 3/6 oz.

E. trachyphloia. F.v.M.—White Bloodwood of Queensland. A moderate-sized tree; timber hard, heavy and durable; used for fencing and building purposes; generally grows in hilly country. 25/- lb., 3/6 oz.

E. triantha Link.—White Mahogany. A large tree, often attaining a height of 150 to 200 feet and diameter 4 to 5 feet. Timber is useful for build-

ing purposes, flooring boards, slabs, rails, palings and railway sleepers; is easily wrought, heavy and durable, and cannot be beaten for standing in the ground, such as posts, etc. This variety grows in tropical country equally as well as cool climate. Light in colour, of a satiny lustre when planed, and is prettily waved. *E. acmeniodes*. Schau. £1 lb., 3/- oz.

***E. umbellata* Domin.**—Forest Red Gum. A large tree, attaining a height of over 150 feet and diameter 5 feet, with long, straight stem; similar to *E. saligna*; closely allied to *E. rostrata*; timber very durable and useful; esteemed for wheelwrights' work, telegraph poles, beams, railway sleepers, house carpentry, fencing, and is very durable under ground; freely distributed throughout most parts of Australia; this is one not particular to climate; similar to *rostrata*; grows in tropical as well as cool climate. Grows well in low, moist valleys and in mountainous country. (*E. tereticornis*. F.v.M.). 25/- lb., 3/6 oz.

***E. umbra*.** R. T. Baker.—Stringybark. A tree about 3 feet in diameter and 70 to 80 feet high. This tree is generally found about sides and tops of mountains in rocky situations in the poorest soil, and also extending into low country, and forms a good, useful timber; similar to *E. acmenioides*, and is often mistaken by the woodsmen for the latter. It is largely cut up by the mills for house-building, etc., and it makes good fence posts, rails and palings. £1 lb., 3/- oz.

***E. urceolaris*.** Maiden and Blakely.—Urn-fruited Peppermint. A large umbrageous tree of good form. It occurs on deep sandy loam in moderately cool districts about 2000 to 3000 feet above sea level. It is a fine tree for shade and shelter. The timber is of good quality, and is used for boards, building material, slabs and sleepers. 25/- lb., 3/6 oz.

***E. viminalis*.** Labill.—Manna Gum. An elegant tree of quick growth, attaining in open country a height of 150 feet and diameter 8 feet, but in deep forest glens rising to a great height; the stems of this variety are of almost uniform thickness to a great height and very straight; thrives in poor and sandy soils on the sides of mountains and in low, flat, open country; timber fissile; used for palings, rails, rough building material and for fuel. The blossoms afford sweet nectar for bees. £1 lb., 3/- oz.

***E. virgata*.** Sieber.—Yellow-topped Ash. A small ornamental species, suitable for wind-breaks in sub-alpine regions. It withstands a fair amount of frost and snow. It likes well-drained but perpetually moist, cold soils, and does best on the shady sides of rocky hills. £1 lb., 3/- oz.

***E. viridis*.** R. T. Baker. (*E. acacioides*: A. Cunn.).—Green Mallee. A small, slender, graceful Mallee, rarely exceeding 20 feet high, with a dark green narrow foliage. It flowers profusely, and in dry hot areas it is regarded as a valuable bee plant. The timber is too small to be of any use except for light garden props or poles. 25/- lb., 3/6 oz.

***E. vitrea*.** R. T. Baker.—White-topped Messmate. A medium-sized to large tree, usually of a Willow-like habit, and is frequently associated with *E. pauciflora* (*E. coriacea*) in sub-alpine regions, and specially recommended for cold districts. The timber is of a light brown colour, is strong and elastic, and is durable in the ground. 25/- lb., 3/6 oz.

***E. Wilkinsoniana*.** R. T. Baker.—Stringybark. A tree about 150 feet high and 4 feet in diameter; a straight tree and a fast grower. Timber similar to *E. Muelleriana*, and grows at an elevation of between 2000 and 3000 feet above sea level. 25/- lb., 3/6 oz.

EUCALYPTUS SEEDS.

My method in planting Euc. seeds of all kinds is to plant them in seed beds; the same principle as planting cabbage seed. After preparing the bed, pull back enough soil that will cover one inch over the seed, then level it well where you are going to sow the seed; then water the soil. When the water soaks away sow the seed. It is a good plan to have sand mixed with the seed, so that it will not sow too thick and in patches. When the seed is sown cover one inch or less of soil over it and bat it down lightly with a spade or roller; then water it, and continue watering each evening until the little plants show above the ground. When the plants

are from four to six inches high plant them out about ten feet apart.

Eucalyptus when grown close together make the very best of timber. They produce a rapid growth and grow long, straight stems, as each one is growing straight for the light. This is my experience here in the wild forests, where they are growing almost so close together that one can hardly get through. They are the very best of timber, as the roots almost appear to go straight down, and do not keep on the surface. I have seen the roots of Eucalyptus down to 70 feet in the soil, so it will give an idea of where they get their moisture.

ACACIAS.

It may be important for Growers to know that none of the Acacias that I catalogue sucker from the roots.

Acacia adenophora.—A very similar tree to *Ac. normalis*, except the veins on the bark; very similar flowers, a mass of golden yellow, in bunches; very good for tan bark; contains a fair amount of tannic acid. £1 lb., 3/- oz.

Acacia adunca. A. Cunn.—A small tree; noted for its abundance of pretty golden flowers. 14/- lb., 2/- oz. Suitable for bees.

Acacia aneura. F.v.M.—Mulga. This is a very dry country species; generally shrubby trees so close together that one can hardly get through. These are felled for stock of all kinds. This is what stock have to depend on in times of drought. 14/- lb., 2/- oz.

Acacia Baileyana. F.v.M.—The Cootamundra Silver Wattle. A highly-prized ornamental tree; flowers small and very numerous, of a bright golden colour; grows in rich, sandy loam; bark used for tanning; medium climate. 8/- lb., 1/6 oz.

Acacia buxifolia. A. Cunn.—A small shrub suitable for small gardens; flowers yellow and plentiful. 14/- lb., 2/- oz.

Acacia dealbata.—The Silver Wattle. Besides its silver leaves is a mass of golden-coloured ball flowers. The bark is used for tanning. Likes a cold climate. A tree about 12 to 15 feet high. 16/- lb., 2/6 oz.

Acacia Deanei. R. T. Baker.—Deane's Wattle. A fern-leaved species, with rather pale blooms. It likes fairly hot conditions, and will stand a fair amount of drought. It rarely exceeds 30 feet high. 14/- lb., 2/- oz.

Acacia decora. Reichb.—Silver Wattle. A small acacia noted for its abundance of golden flowers; very suitable for flower gardens. 14/- lb., 2/- oz.

Acacia decurrens Willd var normalis.—Price 5/- lb., 1/- oz. Thirty to thirty-six per cent. Tannic Acid.

Acacia difformis. R. T. Baker.—“Black Wattle.” 10/- lb., 1/6 oz.

Acacia discolor. Willd.—This is very suitable for small gardens; a small tree, 6 to 8 feet high, having a pretty foliage with shining leaves, with a mass of yellow flowers. Very suitable for bees owing to its early flowering. 14/- lb., 2/- oz.

Acacia elata. A. Cunn.—Cedar Wattle. A tree attaining a height of about 80 feet. Twenty to 28 per cent. Tannic Acid. When young the foliage of this tree is very handsome, owing to its leaves being similar to those of a pepper tree; dark and shining green, very similar to those of *Acacia discolor*. About 2ft. 6in. diameter. Timber often used for making boxes, fruit cases, etc., and a good fuel. £1 lb., 2/6 oz.

Acacia elongata. Sims.—Very similar to *Acacia linifolia*, only leaves longer and ball flowers very numerous; height about 6 to 7 feet; likes fairly cool climate. 16/- lb., 2/6 oz.

Acacia falcata. Willd.—A medium to small tree; leaves broad and long; flowers cream colour and very plentiful; suitable for poor, sandy soil; very early flowering variety; suitable for bees. 8/- lb., 1/6 oz.

Acacia floribunda. Willd.—This tree is well worth cultivation owing to its abundance of golden-coloured flowers. It grows from about 15 to 20 feet high; requires a warm to medium climate and thrives on hillsides in fair soil. 16/- lb., 2/6 oz.

Acacia frimbriata.—A small tree about 6 or 7 feet high, with a mass of yellow flowers; very suitable for small gardens. £1 lb., 3/- oz.

Acacia glaucescens. Willd.—Coast Myall. A silver-leaf tree about 40 feet high, with long-spiked yellow flowers; a splendid shade tree. Not a tree that will die away quickly; lasts for years. £1 lb., 3/- oz.

Acacia homalophylla. A. Cunn.—Commonly known as Yarran. A very dry country species; greatly used for fodder in dry times, as stock eat it freely; timber used for cabinet and ornamental work; has a very fragrant odour and contains this for years after cut. £1 lb., 3/- oz.

Acacia Kettlewellae.—Kettlewell's Wattle. Suitable for cold climates; makes a nice ornamental tree. £1 lb., 3/- oz.

Acacia linearis.—A tree about 8 to 10 feet high, with long spike flowers, yellow colour; looks very pretty owing

to narrow leaves, as you can hardly see the leaves when in flower, such a mass of flowers; suitable for cool climate. £1 lb., 3/- oz.

Acacia linifolia. Willd.—This tree is suitable for small gardens; seldom reaches 10 feet high, but flowers for a great length of time, having beautiful yellow flowers, and foliage handsome owing to long stripe-like lines. 12/- lb., 2/- oz.

Acacia longifolia. Willd.—This is well worth cultivation owing its abundance of golden flowers; grows about 12 feet high; sandy soil preferred; warm to medium climate. 12/- lb., 2/- oz.

Acacia longifolia var sophorae. F.v.M.—A tree about 12 feet high; flowers similar to *Acacia longifolia*; foliage shorter and broader and darker green in colour. This variety grows better near the coast or on low lands; covered with a mass of long-spiked flowers, golden coloured. This is very like *Acacia longifolia*, only shorter and broader leaf. 14/- lb., 2/- oz.

Acacia melanoxylon. R. Br.—A fine ornamental tree, attaining a very large size; timber dark in colour; hard, durable and finely-veined; valuable for cabinet work, staves for casks and numerous other purposes; grows along watercourses and in low, flat country; cold climate. 16/- lb., 2/6 oz.

Acacia mollissima.—A tree about 15 to 20 feet high. It is used for tanning purposes as well as firewood; tannic acid is 30 to 42 per cent.; has a mass of light yellow blooms. 12/- lb., 2/- oz.

Acacia myrtifolia.—A small shrub about 3 to 4 feet high, suitable for small gardens, with a mass of light yellow-coloured flowers; this, with its myrtle-coloured leaves, looks very nice. £1 lb., 2/6 oz.

Acacia obtusata. Sieb.—A small tree about 7 feet high; very suitable for small gardens owing to its mass of yellow flowers. 14/- lb., 2/- oz.

Acacia oxycedrus. Sieb.—Prickly Wattle. This is a very early variety, with a mass of long, golden spike-like flowers similar to *Acacia longifolia* in flower. It is suitable for hedges, as it

would be impregnable against stock. £1 lb., 3/- oz.

Acacia pauciglandulosa.—Price 8/- lb., 1/6 oz. Twenty to thirty-one per cent. Tannic Acid.

Acacia pendula. A. Cunn.—Myall. A tree about 20 feet high; wood fragrant; handsome flowering tree; foliage used for feeding stock in dry times; timber used by cabinetmakers. £1 lb., 3/- oz.

Acacia podalyriaefolia. A. Cunn.—Queensland Silver Wattle. Only a small shrubby tree. One of the earliest to flower, and keeps on flowering 10 to 12 weeks. Even when not flowering tree has a very striking appearance owing to its blue or silvery-coloured leaves. Flowers of a bright yellow and in clusters; commences to flower the second year of growth. Found growing in the south end of Queensland, on the Downs in the cold country, nearly 3000 feet above sea level. Great favourite for bees owing to its early flowering. Even the Sydney climate suits it well. 12/- lb., 2/- oz.

Acacia prominens. A. Cunn.—Silver Wattle. A very handsome wattle owing to its white, silvery leaves and its mass of flowers. This tree, in good, favourable soil, will reach over 70 feet in height and over 1 foot in diameter, particularly when grown close together. The timber is used for axe handles, fruit cases, and makes good fuel. The bark is sometimes used for tanning purposes, but not near as strong in tanning as some of the Acacias. It requires a rich soil; thrives on low, flat country and hillsides. 12/- lb., 2/- oz.

Acacia pruinosa. A. Cunn.—Mottled Barked Wattle. A very pretty wattle owing to its large ferny leaves and

large, spreading, drooping habits. It grows about 20 feet high and spreads fully as much. The flowers are very numerous and handsome. Requires a warm or medium climate and fair soil. 12/- lb., 2/- oz.

Acacia pycnantha. Benth.—Golden Wattle. Tree attains a height about 20 feet, of rapid growth; suitable for coastal districts and sandy or loamy soil. Noted for its golden mass of flowers. The bark from the aged tree is used for tanning purposes. Thrives in warm climates. Have not seen this variety in cold parts. 14/- lb., 2/- oz. Contains 46 per cent. Tannic Acid. Has the largest ball flowers I know of.

Acacia spectabilis. F.v.M.—A beautiful silver tree with large, bright, golden ball flowers. £1 lb., 3/- oz.

Acacia suaveolens. Willd.—A small garden Acacia usually found growing in sandy loam. One of the first to flower; early flowering variety. 16/- lb., 2/6 oz.

Acacia undulifolia.—A small tree; very similar to *Acacia podalyriaefolia*, only smaller tree, and narrower leaves undulating; suitable for gardens; has a mass of golden ball flowers; leaves silver colour. 25/- lb., 3/6 oz.

Acacia vestita.—This Acacia is suitable for small gardens; grows from 6 to about 8 feet high, and has a mass of pretty blooms; the head is very spreading; commonly named Kangaroo or Sheep Wattle; eaten by all stock. £1 lb., 3/- oz.

Albizzia lophantha. Benth.—A small, spreading tree, ferny-leaved, having an abundance of flowers; a tree well worthy of culture. 14/- lb., 2/- oz.

ACACIA SEEDS.

In sowing the seed of the Acacias my method is to plant them in seed beds. After getting the ground prepared, pull the soil back from where you are going to sow the seed, then, after sprinkling the seed in, cover the soil about one inch over the seed and bat it down with the back of a spade

or roller lightly, and pour boiling water all over the seed bed, and throw some bags on top to keep the steam in until it cools off.

This is the best method that I know of for bringing the seed up quickly. You would have to keep the ground damp until they come up. This may

be two or three weeks before they show.

Acacia seed is one of the hardest to germinate owing to its hardness. But the boiling water softens them and does not hurt the germ.

It may be important to know that most of the Acacia seeds will keep ten years and then germinate well.

When the little plants are about three or four inches high they could be transplanted out, about 10 to 12 feet apart, on a suitable damp day, and if no rain keep watered about once a day for two weeks or even longer, according to the weather.

CASUARINA

Casuarina Cunninghamiana. Miq.—River Oak. A tall, straight tree; timber light, tough and strong; used for bullock yokes, cricket bats, handles, staves and fuel; foliage used for feeding stock. Grows along river banks and creeks, mostly inland; almost any climate. 18/- lb., 2/6 oz.

Casuarina glauca. Sieb.—Swamp Oak. A tree of moderate size; usually straight; of rapid growth; timber red, beautifully marked, hard and tough; used for cabinet work and staves. When the trees are cut down the young growth shoots up quickly from the stump. Foliage makes good fodder for stock. Grows in coast districts, in marshy country and along banks of salt water creeks or rivers. Makes good fuel. Medium climate. 16/- lb., 2/6 oz.

Casuarina nana. Sieber.—A very hardy species for alpine situations. Is very attractive, and rarely exceeds 4 feet in height. 14/- lb., 2/- oz.

Casuarina rigida. Miq.—A dwarf species, useful for planting in barren situations. 14/- lb., 2/- oz.

Casuarina stricta. Ait.—Forest She Oak. Timber handsome, strong and durable; used for veneers and cabinet work, also for shingles and staves. The foliage is largely used for feeding stock in the dry seasons. Grows on mountains or in the valleys in almost any soil. Medium climate. 18/- lb., 2/6 oz.

Casuarina suberosa. Ott and Dietr.—Black Oak. A tree about 40 feet high, with thick foliage; valuable as a shade tree; timber handsome, red, prettily marked, hard and tough; used for cabinet work; good fuel. Grows on sandy land, in valleys or on mountains. 14/- lb., 2/- oz.

Casuarina, torulosa. Ait.—Forest Oak. A tree about 70 feet high and diameter 2½ feet; timber red, hard, heavy and prettily marked; takes high polish; used for cabinet work. Shingles from the timber known to last 30 years and fence rails lasted good 40 years. Bakers use it in preference for the oven; it leaves no ashes. Grows in Queensland, New South Wales and South Australia, in open forests and on the spurs of ranges. Requires good soil and warm or medium climate. 25/- lb., 3/6 oz.

TRISTANIA

Tristania conferta. R. Br.—Brush Box. A noble shade tree, attaining a height of 150 feet and 6 feet in diameter; makes a good avenue tree, the trunk being very straight; timber close-grained, hard, tough and durable;

used for joists, ribs of vessels, wheelwrights' work, house carpentry and squared into beams for the construction of wharves and bridges, and one of the best for street blocks. Grows in open and brush forests in sandy loam. £1 lb., 3/- oz.

CALLITRIS.

The value of Black Pine Bark (*Callitris calcarata*) was demonstrated to several large tanning firms early in the year 1914, and is now being extensively used in the tanning of sole leather by the following firms, i.e.: Messrs. Farleigh, Nettheim and Co., Stanley-street, Burwood, and 80 Clarence-street, Sydney; Messrs. J. C. Ludowici and Co., 17 York-street, Sydney, and Chatswood; J. B. Forsyth and Co., Chatswood; E. Owen, Chatswood; Messrs. Stephenson and Sons, Chatswood; G. Bailey, Chatswood; and several others in New South Wales. Practice has shown that 2-3 Pine and 1-3 Wattle, used as a mixed tannage, will produce high-class sole leather, giving 7 per cent. more weight naturally than leather tanned by Wattle Bark only. A sample of sole leather tanned with *Callitris calcarata* Bark in 1914 was exhibited by the Tanning Branch of the Sydney Technical College at the Panama Exhibition (World's Fair), U.S.A., and secured the Gold Medal against all competitors.

***Callitris calcarata*.** R. Br.—A tree attaining a height of 100 feet and diameter 2 feet; stem very straight. Timber valuable, dark, close-grained

and strong; used for house carpentry and cabinet-making; takes a high polish. Grows inland, in dry situations, on sandy ridges. The bark of this variety gives 39.6 Tannic Acid. White ants do not eat it. 18/- lb., 2/6 oz.

***Callitris cupressiformis*.** Benth.—A handsome tree of medium size; timber of a light colour, close-grained and durable; used for various artisans' work. Grows in poor, sandy soil in somewhat rocky ridges of the coast districts. 25/- lb., 3/6 oz.

***Callitris glauca*.**—R. Br.—White Pine. A tall, straight tree of considerable size, often over 100 feet high; timber strong and durable; lasts a long time in the ground as telegraph poles and fence posts; used also for rails; largely used for house-building, as it resists the white ant, and for furniture and cabinet work, as it takes a high polish. 18/- lb., 2/6 oz.

***Callitris Muelleri*.** Benth.—A handsome ornamental tree, about 35 feet high and 1 foot diameter. Grows in high, rocky situations in sandy soil. 16/- lb., 2/6 oz.

CALLITRIS SEEDS.

One of the most productive ways for growing *Callitris*es for timber is to broadcast the seed and plough it lightly under, say, three inches. That is *Callitris calcarata* and *Callitris robusta*.

The land suitable for these is poor, sandy loam. Where I find them growing in land in their wild state in the hot country is generally on a poor, sandy ridge and sometimes stony. These ridges are locally called "Pine Ridges." In their natural state they grow very close together. The large trees seem to push the smaller ones out and make room for themselves. They grow very

long and straight, and make the best milling timber, particularly *Callitris robusta*, as it is the best of the two, and I think it is the largest.

The *Callitris*es will hardly stand transplanting unless very young and well watered. They are a slow-growing tree for about four years, until the tap root gets well down and established; then the rapid growth commences.

It is well after broadcasting to thin out the weak plants. It takes about 2lb. or more of seed to the acre.

MISCELLANEOUS.

Angophora lanceolata. Cav.—A tree of considerable size, with wide-spreading branches; timber strong and heavy; used by wheelwrights for naves, rough building purposes and slabs; makes excellent fuel. Grows on sides and tops of stony ridges, yielding great quantity of wood, and makes good shade tree. Medium climate. £1 lb., 3/- oz.

Angophora intermedia. D.C.—Apple Tree. Large, wide-spreading tree; timber strong and very durable; used for wheelwright's work, flooring boards, etc.; foliage used to feed stock in dry seasons; makes good shade tree; medium climate. £1 lb., 3/- oz.

Brachychiton acerifolius. F.v.M.—Flame Tree. A beautiful ornamental tree, with bright scarlet bell-shaped flowers. 25/- lb., 3/6 oz.

Brachychiton populneus. R. Br.—Kurrajong. A handsome ornamental shade tree; foliage greatly used as fodder for stock in dry seasons; it will stand severe droughts. Grows in almost any soil. 14/- lb., 2/- oz.

Callistemon lanceolatus. D.C.—Crimson-flowering Bottle Brush. Generally grows in swampy land or along banks of creeks. Flowers very showy, growing in spikes 4 or 5 inches long. £1 lb., 3/- oz.

Callistemon linearis. DC.—A red flowering species, useful for planting in rocky situations. £1 lb., 3/- oz.

Callistemon salignus. DC.—A small tree, very straight; often reaches to height of 50 or 60 feet; found growing in very swampy land; good for fence posts; stands well in the salt water, as it is not a favourite of the marine life. £1 lb., 3/- oz.

Leptospermum abnorme. F.v.M.—Tall Tea Tree. A small, graceful shrub or small tree, sometimes exceeding 30 feet high. It flowers profusely, and its white silvery flowers are very striking. It likes warm, moist positions. £1 lb., 3/- oz.

Leptospermum flavescens. Sm.—Common Tea Tree. A smaller plant than the preceding, but nevertheless a

very handsome species, and suitable for ponds and dripping rock work. £1 lb., 3/- oz.

Leptospermum juniperinum. Sm.—Swamp Tea Tree. A slender species with narrow prickly leaves, usually on the margins of swamps and shallow depressions. It is a free flowerer, and when grown on moist rocks it is singularly graceful. £1 lb., 3/- oz.

Leptospermum laevigatum. Sm.—Sandblind. This is suitable for growing along the sea coast in sandy ground. It grows about 12 feet high. 18/- lb., 2/6 oz.

Leptospermum persiciflorum Salisb.—Large pink flowering variety; suitable for hedges and gardens, etc. £1 lb., 3/- oz.

Melaleuca ericifolia. Sm.—Very suitable for swampy land. 25/- lb., 3/6 oz.

Melaleuca leucadendron.—White Ti-tree. A tree 80 feet high and 4 feet diameter; timber hard, close-grained; excellent for keels, ribs and knees of vessels, piles and fence posts in damp situations, being almost imperishable underground. Grows on low, sandy flats in the coast districts, and makes good shade tree owing to thick foliage. £1 lb., 3/- oz.

Melaleuca styphelioides. Sm.—This tree grows along salt and fresh water marshes and in swampy land. It is one of the paper bark ti-trees, seldom more than 2 feet through and a height about 50 feet. The timber is used for various purposes. 25/- lb., 3/6 oz.

Melaleuca thymifolia. Sm.—A small shrub; grows in damp places; suitable for small gardens; bears abundance of red flowers; easily grown. Height 3 to 4 feet. 4/- oz.

Syncarpia laurifolia. Ten.—Turpentine. A magnificent tree, often 200 feet in height; timber valuable for piles and fence posts, being impervious to the toredo and very durable underground. Makes good ornamental tree. Medium climate. £1 lb., 3/- oz.

Macrozamia spiralis. Miq.—Burrawong. 7/- 100 seeds or £2/10/- 1000.

HINTS ON GROWING TREES TO MAKE MORE RAPID GROWTH.

About one-third of the young limbs should be plucked downwards and pulled off, as they break easily. They bring the eye with them and prevent the sucker growth from growing. This may be done when the tree is four to five feet high; then, as it grows higher, the same may be done again. But always leave two-thirds of the limbs on to draw the sap. I have often done this to trees twelve feet high with a hook, plucking the little limbs downwards. If the tree is left to grow all these useless limbs it would prevent the growth of the tree, as the growth would be going into these limbs, and they would fall off eventually. This will

carry the tree up to be long and have straight stems. When the timber is matured for milling purposes, etc., the timber should always be cut in the autumn, or when the sap is right down, as the timber is close-grained and will last twice as long as if full of sap in other seasons, as when the sap dries away it leaves the grain open. All Eucalypts when felled sucker up from the stump. Three suckers should be left on each stump. This will give three more trees in a very short time, as it has the whole strength of the stump to grow them, as you will see by plate showing of *E. saligna*, even growing in its native state without any cultivation.



